Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

INDEX TO GENERA.

Abies 107
Abra 138
Acara 255
Accipiter 27
Acer 101
Achelous 120
Achillea 116
Achrochordus 202
Actæa 239
Actodromas 30
Acus 144
Ægidium 296
Ægialitis 28
Agalychnis 205
Agelæus 24
Agrostis 116
Aix 36
Alligator 48
Allorisma 70, 167
Alpheus 242
Alyssum 111
Amblyopsis 297
Ambonychia 319
Ambrosia 110
Amia 105
Amiva 216, 218, 220, 221, 222
Ammodromus 22
Amphidesma 128, 138
Anacyrtus 266
Analis 205
Anaphthalmus 297
Anas 36
Ancistrodon 48, 205, 206, 209
Anchitherium 118, 199
Aniculus 240
Anodonta 188
Anolis 200, 213, 218, 220
Anomia 131
Anosteira 102, 114
Anostomus 258
Anser 98
Anthus 19
Aphyocharax 260, 291
Aplysia 140
Aralia 106
Arca 129, 132
Archæscaris 335
Arcnæus 121
Arctomys 230
Ardea 33
Asphidium 53
Astarte 134
Asterias 148
Atelopus 205, 222
Aulastomum 306
Avicula 133
Aviculopecten 60, 161, 178
Aythya 37

Baena 228
Balæna 13
Balanus 125
Bascanion 49
Bellerophon 77
Bernicla 36
Bittium 142
Botaurus 34
Bothriechis 204, 206, 207
Bothriocephalus 306
Bothriopsis 206, 208
Bothrops 204
Bouvardia 52
Brachyotus 27
Branchiostoma 129
Brochis 112, 277, 291
Brycon 261
Bucephala 37
Bufo 205, 216, 219
Bulla 140
Busycon 129, 144
Butorides 33

Cacabocrinus 59
Calidris 31
Callichthys 275, 277
Callinectes 120
Callophysus 292
Caloptenus 149
Camilia 200
Campeloma 181

Cancellaria..... 146
Cancer..... 120
Caprifolium..... 107
Carapus..... 257
Cardinalis 24
Cardiomorpha..... 72, 327
Cardita..... 134
Cardium..... 134
Cariacus..... 13
Carpilius..... 239
Cassia..... 117
Cassis..... 143
Cathartes..... 27
Catherpes..... 233
Catostoma..... 212
Caudisona..... 48, 204
Cauloxenus..... 297
Cenobita..... 241
Ceratiocaris..... 332
Cercis..... 106
Cercomya..... 71
Cerithiopsis..... 144
Cerithium..... 141
Ceromya..... 328
Ceromyopsis..... 328
Ceryle..... 26
Cetopsis..... 292
Chætostoma..... 286
Chalceus..... 262
Chalcinus..... 265
Chama..... 134
Characidium..... 259, 291
Charadrius..... 28
Chaulelasmus..... 36
Chelonia..... 49
Chersydrus..... 202
Chettusia..... 194
Chione..... 136
Chiton..... 140
Chordeiles..... 26
Chrœcocephalus..... 40
Chrysomitris..... 21
Cichla..... 291
Cimex..... 295
Circus..... 27
Cissus..... 118
Cistothorus..... 20
Clidastes..... 104
Clinopistha..... 67
Cnemidophorus.....47, 216
Coccygus..... 27
Cochlodesma..... 139
Colaptes..... 27
Colobognathus..... 205, 211
Colophrys..... 212
Columbella..... 143
Colymbus..... 47
Coniophanes..... 204, 216
Conocardium..... 65
Conophis..... 204
Contia..... 223
Conularia..... 84
Convolvulus..... 117
Corbula..... 139
Corydoras..... 112, 277, 278
Corythophanes..... 200
Corvus..... 26
Cotyle..... 21
Cratægus..... 107
Crenicichla..... 252
Crepidula..... 140
Crocodilus..... 104
Cumingia..... 138
Curimatus..... 258, 291
Cyclonema..... 79
Cyclura..... 205, 216
Cypræa..... 143
Cypricardina..... 162
Cyrtoceras..... 86
Cythere..... 331
Cytherea..... 136

Dafila..... 36
Dalmanites..... 91
Delphinus..... 13
Dendroeca..... 21
Deutzia..... 52
Dianema..... 112, 276, 291
Dibothrium..... 306
Didelphys..... 15
Dionæa..... 118
Diplacus..... 157
Diplodonta..... 134
Dipsas..... 204
Dolabra..... 326
Dolatocrinus..... 57
Dolichonyx..... 24
Dolium..... 143
Donax..... 137
Doras..... 55, 270, 292
Dosinia..... 137
Dromicus..... 201, 218, 222
Dryiophis..... 204

Edestosaurus..... 298
Edmondia..... 72
Elaps..... 203, 204, 209, 216
Elotherium..... 10
Empidonax..... 234
Emys..... 103, 154, 155, 228
Entalis..... 140
Epicrates..... 205
Epigæa..... 52
Equus..... 50, 113
Ereunetes..... 31
Eriphia..... 239
Erythrolamprus..... 203, 204
Etheostoma..... 259

Eulima 142
Eupagurus 124
Euphorbia 296

Falco 27, 94
Fasciolaria 147
Fenestella 159
Fiber 14
Fissurella 141
Fraxinus 110, 245
Fulix 37
Fundulus 217

Galeodes 295
Gallinago 30
Gambetta 32
Gasteropelecus 265
Gastrochæna 139
Garzetta 33
Gebia 242
Gelasimus 121
Gemma 136
Geophagus 250, 291
Geothlypis 20
Gleditschia 106, 107
Glyptocrinus 314
Glyptosaurus 105
Goniodactylus 200, 222
Gordius 306
Graculus 38
Grammysia 72
Grapsus 240
Gymnocladus 106
Gyroceras 87

Hadrohyus 248
Halesia 107
Heliætus 27
Haliplana 46
Hamamelis 295
Helicops 222
Helix 147
Hemidactylus 218, 220
Hemiodus 291
Hepatus 124
Herodias 33
Heros 254
Herpetodryas 204
Heterocrinus 308
Himantodes 201
Hippa 124, 240
Hipparion 112
Hirundo 21, 306
Holcodus 298
Holopea 172
Holotaxis 257
Homalochilus 218
Homarus 124
Hoplosternum 277

Hybemys 103
Hydrochelidon 46
Hydrolycus 292
Hydrops 216, 217
Hygrogonus 256, 291
Hyla 49, 219, 222
Hyperanodon 222
Hyposaurus 104
Hypsirhynchus 218
Hyrachyus 229
Hyracodon 229

Icterus 24
Iguanodectes 260, 291
Ilyonassa 143
Isocardia 183
Isonema 79
Itea 107

Læmolyta 258
Lagopus 96
Laris 108
Larus 39
Lasiurus 14
Leda 133
Lepidosteus 105
Leporinus 259
Lepotophis 49
Leptodira 204
Leptognathus 204
Lepus 14, 96
Libinia 120
Lilium 117
Lima 131
Limax 147
Limosa 32
Limulus 125, 129
Lindernia 157
Lingula 125
Lingulella 185
Liocardium 134
Liocephalus 218
Liodon 297
Liophis 204, 222
Liposarcus 284, 292
Liriodendron 106
Lithodytes 216, 219
Littorina 141
Loligo 126
Lonicera 107
Lophiodon 9, 229
Loricaria 289
Loxonema 174
Lucina 62, 134
Lucinopsis 137
Lupa 239
Lutra 12
Lynx 12
Lyonsia 139

Mabuia 222
Macrocheilus..... 328
Macrodon..... 257
Macrorhampus 30
Mactra 137
Magnolia..... 106, 109
Malacoclemys 49
Mareca 36
Marginella 143
Masticophis..... 204, 216
Mastodon..... 50, 113, 198
Megalobrycon 262, 291
Megambonia 321
Melampus..... 147
Melospiza..... 22
Menippe..... 120, 239
Mercenaria 134
Mergus 37
Mesonauta..... 254
Mesops 527
Mimulus..... 115
Mimus..... 19
Mitchella 52
Mithraculus..... 239
Modiola 134
Modiolopsis 323
Murchisonia 81, 175
Murex..... 147
Mus 14
Mya..... 139
Myalina..... 127, 139
Myiozetetes..... 234
Myletes..... 55, 267, 291
Mysops..... 232
Mytilus..... 134

Nassa 144
Natica..... 142
Naticopsis 76
Nautilus..... 88
Nerodia 48
Nettion..... 36
Neverita..... 143
Ninia 200, 205
Nothopsis..... 201
Nucula..... 133
Numenius 32
Nyctea 96

Obeliscus 142
Octopus 126
Ocypode..... 122, 240
Odostomia 142
Oedemia..... 37
Oestocephalus..... 53
Oliva..... 142
Olivella..... 143
Omalacantha..... 238
Ophibolus..... 48, 200
Ophiophragmum 148
Ophisaurus 48
Opomola..... 151
Oreodon 248
Orthoceras 172, 330
Orthonema 81
Ortyx 28
Osteoglossum 257, 291
Ostrea..... 131
Otocinclus 112, 283, 291
Oxybelis 216
Oxyrrhopus 201, 216

Pachycheles 225
Palæmon..... 124, 225
Palæotherium..... 114, 118
Palæosyops 114, 118, 197, 229
Panæus..... 243
Pandion 27
Pandora 139
Panopæa..... 139
Panopæus 120, 239
Panulirus..... 225, 242
Paramys..... 231
Pariodon..... 55, 290, 292
Pariolius 289, 291
Parula 20
Passerculus..... 21
Pecten 131
Pectunculus 132
Pelamis 204
Pelecanus..... 37
Pelidna 30
Pellona 256
Peneus 124
Persephona 123
Petricola..... 137
Petrolisthes 240
Phallus..... 297
Philypnus 217
Pholadomya..... 71
Pholas..... 139
Phractocephalus..... 292
Phrynosoma 305
Pilumnus 120
Pimelodus 270
Pinna 133
Pinnotheres..... 123
Pinus 101, 107
Pipilo 24
Piramutana 292
Platyceras..... 73, 170
Platyonychus 120
Platyostoma 169
Plecostomus..... 55, 285, 292
Pleurotomaria..... 81, 143, 176
Plicatula..... 131
Pliocercus 200
Plistodon 216

Podiceps 47
Podilymbus 47
Podocnemis 222
Poecilichthys 259
Polycera 140
Porthidium 206, 207
Porzana 35
Poterocrinites 310
Procyon 12
Phylodactylus 205
Physopyxis 112, 273, 291
Prochilodus 258
Productus 74
Proctus 89
Progne 21
Protohippus 50
Pseudorhamdia 269
Pseudotremia 297
Pterinea 162
Pterophyllum 250, 291
Ptilodictya 63, 160, 317
Puffinus 38
Purpura 143
Putorius 12
Pyranga 21
Pyrula 145

Quercus 155
Querquedula 36
Quiscalus 25

Ræta 137
Rallus 34
Rana 49
Ranella 147
Ranula 222
Rapana 144
Raphidophora 297
Reduvius 51
Recurvirostra 33
Renilla 129
Retzia 318
Rhadinæa 204, 212
Rhyacophilus 32
Rhinoceros 10, 248
Rhinodoras 292
Rhynchops 46
Roeboides 55, 265, 292
Rubus 296

Salix 109
Salmo 305
Sanguinolites 68
Sauropleura 53
Scalaria 141
Scalops 14
Sceloporus 205, 216
Schizodus 72, 165
Sciuravus 230
Sciurus 14
Scytopis 222
Sedgwickia 71, 323
Semele 138
Semicassis 143
Serrasalmo 268, 292
Sesaima 121
Sigaretus 142
Siliquaria 138
Sinopa 116
Smilisca 205
Solarium 141
Solemya 139
Solen 138
Soleniscus 329
Solenomya 66
Sphærodactylus 216, 218
Spilotes 204
Spirifer 179
Squatarola 29
Stegophilus 55, 290
Stenorhina 205
Sterna 43
Sternopygus 257
Stethaprion 261, 291
Stictopora 63
Strepsilas 29
Streptacis 173
Strigilla 138
Strix 27
Strombus 147
Sturnella 25
Stylemys 248
Sula 38
Symbranchus 290
Symphemia 32
Symphysodon 291
Systoma 216

Tantilla 204
Tænia 53
Teleuraspis 206
Tellina 138
Telmatodytes 19
Testudo 154
Tetragonopterus 217, 260, 291
Titanotherium 114
Thalasseus 42
Thrasops 200, 204, 218
Thryothorus 19
Torenia 118, 157
Trachycephalus 219
Trichomycterus 289
Triforis 142
Trigonocephalus 203
Tringoides 32
Trionyx 154, 228
Triportheus 263, 291
Trochita 82

Trochoceras 88
Trochonema 82
Trogosus 115, 229
Trypheropsis..... 205
Turbo 141
Turbonilla 142
Turdus 19
Tyrannus..... 26

Uarus 253
Uca 240
Ungualia 218
Unio 188
Utriculus 140

Vandellia 55
Verbascum..... 296
Vermetus 141
Vireo..... 21
Viviparus..... 182
Vulpes 12

Xenodermus 202
Xiphophorus..... 217
Xiphostoma..... 267

Yoldia..... 133

Zathorax..... 112, 271, 291
Zenædura..... 28
Zizyphinus..... 141
Zonotrichia 22

GENERAL INDEX.

Adams, Rev. E. E., Announcement of death of, 297.
Amendment of By-laws, 103.

Cavada, Gen. F. F., Announcement of death of, 297.
Cohen, J. J., M.D., Announcement of death of, 56.
Cope, E. D., Observations on Sauropleura remex, 53; On Fishes from the Amazon River, 55; On some of the Siluroids of the Amazon, 112; On the Fishes of the Ambyiacu River, 117, 250; On Plectognathi and Lophobranchii, 157; Contributions to the Herpetology of Tropical America, No. 9, 198, 200; On a species of Galeodes, 295; On the Fauna of the Wyandotte Cave, 297; On fossil reptiles from the Cretaceous of Western Kansas, 297; On a peculiar habit in Phrynosoma, 305.
Correspondence during 1871, 348.
Coues, E., Notes on the Natural History of Fort Macon, N. C., and vicinity. No. 1; 9, 12. Same, No. 2; 112, 120.

Donations to the Library, 351.
Duméril, Prof. C., Announcement of death of, 102.
Dutton, Lieut., On Silurian and Devonian Brachiopoda, 112.

Election of officers, 346.
Elections during 1871, 347.

Gentry, Mr., On Alyssum calycinum, Linn., 111.

Holbrook, J. E., M.D., Announcement of death of, 237.

Lea, I., Descriptions of twenty new species of Unionidæ of the United States, 157, 189; Description of three new species of Exotic Unionidæ, 188.
Lawrence, Geo. N., Descriptions of new species of Birds of the families Troglodytidæ and Tyrannidæ, 233.
Leidy, Jos., On a small collection of fossils from California, 50; Remarks on Tænia mediocanellata, 53; On some extinct Turtles from Wyoming Territory, 102; On Polydactylism in a Horse, 112; On remains of Mastodon and Horse in North Carolina, 113; Remains of extinct mammals from Wyoming, 113; Remarks on a fossil Testudo from Wyoming, 154; Remarks on supposed fossil Turtle Eggs, 154, Remarks on the Garnets of Green's Creek, Delaware Co., 155; Remarks on donation of fossils from Wyoming, 197; Remarks on Mastodon, etc., of California, 198; Note on Anchitherium, 199; Remarks on fossil Vertebrates from Wyoming, 228; Notice of some extinct Rodents, 230; Remarks on the Minerals of Mount Mica, 245; Remarks on fossils of Oregon, 247; Flies as means of communicating Contagious Diseases, 297; Notice of some Worms, 305.

Marsh, O. C., On a tooth of Lophio don, 9; On new reptiles and fishes from the Cretaceous and Tertiary Formations, 103.
Marshall, Benj., Announcement of death of, 103.
Meehan, Thos., On a pear presenting the external appearance of an ap-

ple, 10; Remarks on Reduvius novenarius, 51; Remarks on Bouvardia leiantha and Deutzia gracilis, 52; On the Fascicles of Pinus mitis and on Acer rubrum, 101; Morphology of the Carpellary Scales in Larix, 106; On the Flowers of Magnolia purpurea, 109; On Ambrosia artemisiæfolia, 110; On the Growing Force of Plants and on the shape of Cotyledons, 116; On the Stigma of Torenia Asiatica and the Tendril of Cissus Amazonica, 118; On the Cotyledons of Quercus, 155; On bud scales and involucral bracts, 245; on the seeds of Hamamelis Virginica, 295; On the angular divergence in the branches of plants, 295.

Meek, F. B., Descriptions of new species of Invertebrate fossils from the Carboniferous and Devonian Rocks of Ohio, 51, 57; Descriptions of new species of fossils from Ohio and other Western States and Territories, 117, 159; Notice of a new Brachiopod from the Lead-bearing rocks at Mine La Motte, Mo., 157, 185; Descriptions of new Western Palæozoic fossils, mainly from the Cincinnati Groups of the Lower Silurian Series of Ohio, 305, 308.

Morris, Stephen, Announcement of death of, 119.

Murchison, Sir Roderick I., Announcement of death of, 305.

Newton, Prof. A., On certain species of Falconidæ, Tetraonidæ, and Anatidæ, 51, 94.

Ogden, J. A., Synopsis of the genus Chettusia (Lobivanellus) with a description of a new species, 158, 194.

Orne, James H., Announcement of death of, 305.

Peale, C. W., Announcement of death of, 245.

Rand, Theo. D., Notes on Feldspars and other Minerals of Philadelphia and vicinity, 295, 299.

Report of Librarian, 337.

Report of Curators, 338.

Report of the Botanical Committee, 340.

Report of Recording Secretary, 341.

Report of Recorder of Microscopical and Biological Section, 341.

Reports of the Conchological Section, 343.

Streets, T. Hale, Descriptions of five new species of Crustacea from Mexico, 198, 225; Catalogue of Crustacea from the Isthmus of Panama, collected by J. A. McNeil, 237, 238.

Thomas, Prof. C., Contributions to Orthopterology, 117, 149.

Turnbull, W. P., Announcement of death of, 198.

Wetherill, Chas. M., M. D., Announcement of death of, 103.

Wharton, Jos., On Silver Islet, Lake Superior, 56.

PROCEEDINGS

OF THE

ACADEMY OF NATURAL SCIENCES

OF

PHILADELPHIA.

1871.

PUBLICATION COMMITTEE.

JOSEPH LEIDY, M.D., WM. S. VAUX,
ROBERT BRIDGES, M.D., GEO. W. TRYON, JR.,
EDW. J. NOLAN, M.D.

PHILADELPHIA:
ACADEMY OF NATURAL SCIENCES,
Corner of Broad and Sansom Streets.
1871.